

ABSTRACT

A substrate processing system is provided with an ozone generator capable of generating an ozone-containing gas by discharging electricity in an oxygen-containing gas, and a plurality of processing chambers each capable of holding substrates therein to process the substrates by the ozone-containing gas supplied thereto. A flow regulator control an oxygen-containing gas supplied to the ozone generator. A controller controls the flow regulator to control the flow rate of the ozone-containing gas to be supplied to the processing chamber or chambers from the ozone generator through the control of the flow rate of the oxygen-containing gas supplied to the ozone generator.